Speaking of Spinoff

Why not build a space-age "new town" and a national Urban Research and Development Center on the site of the fading NASA Mississippi Test Facility? Here's a report on a daring proposal by a Washington urbanologist . . .

An Idea for a City— Born of the Space Age

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EVERYBODY talks about space spinoff to society, but nobody does anything about it. Well, hardly anybody. It is true, and to the agency's credit, that the National Aeronautics and Space Administration does send out valuable tips to industry on technical developments in the space program that in many cases can be usefully adapted for earthbound enterprise. It's also true that nonaerospace industry, or at least its most forward-looking elements, have put to work some of the systems engineering and management techniques so successfully used in the US missile and space program.

Beyond these efforts, there are also current programs involving the Defense Department and the Department of Housing and Urban Development to explore ways of introducing new technology and mass-production methods into the field of housing construction, an industry now riddled by codes and archaic techniques that make buildings more expensive to build than they should be and less comfortable and functional than they ought to be.

But as useful as these efforts are, they barely scratch the surface of what *could* be done if only we could get cracking in a daring way and apply to earthbound problems the same kind of energy and planning that has gone into the incredible national effort to put men on the moon.

One area where space-age talent, techniques, and push could be put to work is "new towns," that dream we read about so often these days but which remains largely that, just a dream, with only a few excursions into reality such as the two handsome efforts in the Washington, D.C., and Baltimore, Md., areas—the new towns of Reston, Va., and Columbia, Md.

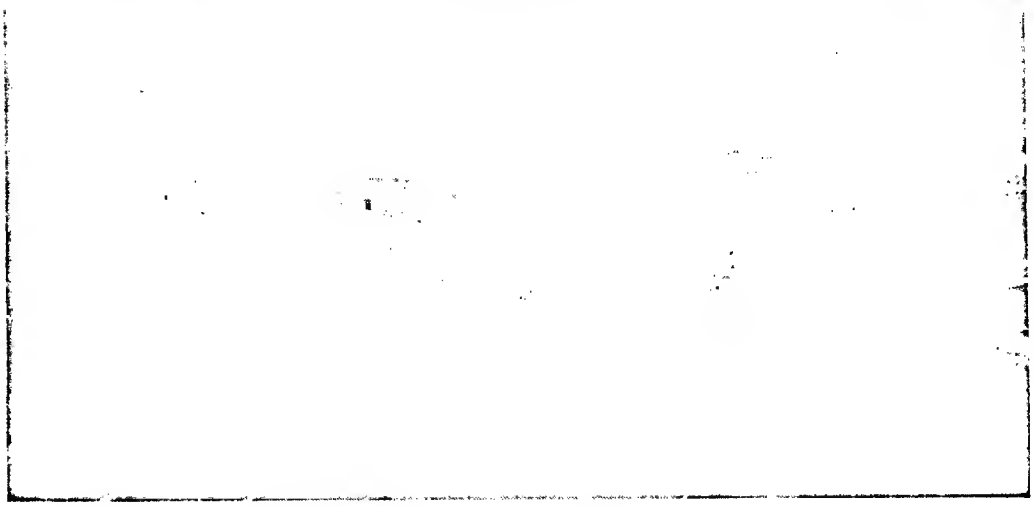
We're told by urban experts that this country will need some [illegible] new towns by the end of the century to accommodate decently the burgeoning American population in environments blessed by clean air to breathe, rewarding local or nearby jobs, intelligently planned transit systems, and, last but hardly least, innovative school systems that will humanely and usefully educate our children's children.

New town planning is admittedly quite complex. It involves not only land-acquisition problems but also the dilemma of finding ways to house and provide community services and local jobs for heterogeneous populations that would include people of various social and economic classes. But the complexity does not excuse the general lack of progress in this field. Exciting and workable concepts are sorely needed.

One very exciting, daring, and common-sense idea along these lines is currently being studied at the highest levels in Washington. Prepared as a proposal to NASA, it is the brainchild of Robert G. Smith, a Washington-based veteran of the aerospace industry who for the past several years has been specializing in innovative approaches to the solutions of pressing urban problems.

Mr. Smith's idea is simple, the sort of conception that makes you wonder why you didn't think of it yourself. He proposes that a new town, which he would call Bicentennial City, to mark the 200th anniversary of the United States, be constructed on NASA-owned land at the site of the fading NASA Mississippi Test Facility near Bay St. Louis, Miss., some fifty miles from New Orleans. MTF was a booming operation during the height of the buildup of the Apollo program, but it is well on its way toward going out of business now that its main purposes have been met. Employment is falling. NASA would play a major role in Mr. Smith's proposed enterprise.

Mr. Smith not only proposes building a new city at



Site for a city? This is an aerial view of the storage, waterway, and testing area at NASA's Mississippi Test Facility, Bay St. Louis, Miss. MTF played a major role in Apollo booster testing, but its use is now fading. Urbanologist Robert G. Smith proposes building a space-age city and Urban Research and Development Center, first of its kind, on the MTF site.

the MTF site; he also offers a highly imaginative approach to the problem of providing a prime source of employment for the people who would live in the new city. He would build at Bicentennial City an Urban Research and Development Center, the first of its kind in the country. Such a complex would, in the manner of aerospace R&D centers, develop and test in a practical way new approaches to city planning and technology. Staffed by people who would live in Bicentennial City, the center could breathe life into urban planning —a field that up to now has been for the most part a paper-study business involving "experts" who often live halfway across the state or the country from the places they're planning for. At Bicentennial City they would live and work in their own city-laboratory.

Mr. Smith notes in his proposal that, while it is generally agreed that we need a national urbanization strategy, for the sake of present cities as well as future population growth, "the United States has no national, prestigious institute or center of knowledge regarding urban technology. . . ."

Why not build such a center and the city to go with it at the MTF location? he asks.

He lists a collection of reasons why it might be just the place. We quote the rationales from his study:

- "The need to develop as many as 100 new towns to [help] absorb the nation's population growth, reduce the pressures on existing and overcrowded urban centers, and to revitalize and strengthen the rural and economically depressed areas of the United States.
- "The [anticipated] increasing population in the Gulf Coast region from 2,700,000 in 1970 to an estimated 4,700,000 in the year 2000.
- "A related requirement for New Orleans to develop satellite towns to absorb some of the metropolitan growth and to minimize some of the related problems arising from that population growth.
- "The phasing down of NASA's Mississippi Test Facility, resulting in job loss and consequent negative economic impact on the surrounding communities.
- "The location of the Mississippi Test Facility in the center of the Gulf Coast region, one of the twelve largest urban growth areas in the United States.
- "The availability of a large tract of public land in the Mississippi Test Facility, plus an excellent and expanding road network, as well as a connecting rail line, deep-water canal, and new airport.
- "The requirement to revitalize the Gulf Coast region that was devastated by Hurricane Camille, and to construct a town that minimizes hurricane damage and loss of life.
- "The need to develop a new town, utilizing the latest technologies and management techniques such as the systems approach, and to create a direct link between urban-technology development and testing and city planning, design, and operation.
- "The need for a national Urban Research and Development Center that emphasizes a systems approach to urban-technology development and testing. This center could be established at the Mississippi Test Facility as facilities and equipment become available. Remaining Mississippi Test Facility functions could be gradually shifted to the Kennedy Space Center as Urban Research and Development Center responsibilities increased.
- "The need to establish (as was the case with the space program) a federal interagency mechanism to coordinate the presently fragmented urban development and technological programs; and to focus these programs and resources on a specific national goal, *i.e.*, 'to develop a combined new-town urban research and development complex to be officially opened in 1976, the bicentennial anniversary of the United States.'
- "A continuing and related requirement to initiate and support national programs that stress federal interagency planning, federal-state-local cooperation, and joint government-business action. The proposed Bicentennial City would provide a focal point for meeting all of these requirements.
- "NASA's proven management ability to coordinate a diverse group of federal agencies, industries, and universities to work toward a common national goal.
- "NASA's experience in dealing effectively with federal, state, and local governments with a broad spectrum of activity.

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• "Planning and development of the Bicentennial City--Urban Research and Development Center complex would, like the Apollo program, attract the best talents of government, private industry, and the universities. Talents could be focused on the planning and construction of a dynamic new town and research center that would not only represent a positive application of our managerial and technological skills to urban development, but would also be a fitting example of our nation's 200 years of progress."

What kind of new town does Mr. Smith visualize? How big would it be? How much land is available?

The MTF site includes some 13,000 acres of NASA-owned land. There is also a buffer zone of more than 125,000 acres, some of which NASA controls. The overall site, Mr. Smith believes, offers more than enough land for a city of between 50,000 and 200,000 inhabitants.

"To build a new town," Mr. Smith suggests, "it is not only necessary to have a large tract of relatively inexpensive land, but also to build a well-planned community from the ground up, including the roads, sewers, hospitals, schools, homes, and commercial centers with the proper spatial balance and with full consideration of the residents' needs. It is necessary to have zoning and discretionary control of the land, at least during initial development of the new town. Since NASA owns 12,428 acres in the MTF area, plus 7,778 acres in the buffer zone, the degree of control during the initial planning and development stages of Bicentennial City would be maximized in terms of the public interest, and this would assure an orderly and systematic town-planning and implementation process."

There would be at least two prime sources of population for the new town. A majority of the residents, Mr. Smith expects, would come from nearby urban centers, specifically New Orleans, while there would also be an influx of people to staff the Urban Research and Development Center—managers, scientists, and technicians—who would come from the New Orleans area and from far beyond.

Although the MTF area is presently in trouble, because of cutbacks in Apollo-connected employment and marginal agriculture, and because nearby Gulf Coast tourism has suffered as a consequence of the Hurricane Camille disaster, the community also has a lot going for it. It has a good road network, a deep-water canal, and rail connections. That system could be expanded to provide emergency evacuation to Bicentennial City in the event of future devastating hurricanes along the Gulf Coast.

As one of many possible design approaches for Bicentennial City, Mr. Smith envisions a self-sustained city of 50,000 to 70,000 people, which could be built on 5,000 to 7,000 acres of the presently defined MTF area.

He suggests that the city center could be an "architecturally and functionally integrated business, commercial, and shopping plaza where surface vehicles—other than public safety and medical vehicles—[would] be restricted, with underground or peripheral parking provided for private automobiles. The downtown commercial plaza and shopping center [would] also contain public administration buildings, hospitals, an auditorium, a central library, and hotels. The necessary linkages to the downtown plaza [would] be accomplished through the systematic design of the city's transportation, water, sewage, and communication systems. All utilities [would] be placed underground and common conduits [would] be used where possible."

To encourage social, racial, and economic diversity, Mr. Smith proposes that "the city center be surrounded by ten villages of 5,000 to 7,000 people per village; each village served by a multipurpose shopping, educational, and recreational center. To emphasize the diversity inherent in human needs, the overall design and specific structures in each village [would] have individual characteristics [to] differentiate it from each of the other villages."

The "beauty part," of course, is that since the total acreage and tracts would be controlled as public land, the overall plan and its execution could be carried out to permit what Mr. Smith calls "an optimum match between people's needs, design, city functions, aesthetics, and technological innovation." Free from archaic codes, planners could use the latest materials and construction techniques. They would also be free to test on-site the very latest ideas, ideas that could emerge from the local Urban Research and Development Center. The Center would *not* be a paper-producing think-tank but truly a living laboratory.

As Mr. Smith points out: "Other than the need for a sound economic and employment base, the rationale for and considerations that [enter] into the proposal for a National Urban Research and Development Center are [also] based on the fact that there is no national center for conducting urban research, technology development, and testing, in the same sense that NASA has R&D facilities like the . . . Manned Spacecraft Center; the Air Force, the Wright Air Development Center; the Navy, the Naval Research Laboratory; and the Army, the Aberdeen Proving Ground.

Such a center, Mr. Smith believes, could bring unity to what until now has been a quite fragmented urban-development effort around the country. Not only would the center be physically incorporated into the overall design of Bicentennial City, but also concepts developed at the center would serve the emerging requirements of a real city as it grew. "Thus," as he suggests, "a closed loop between basic and applied research and practical applications, and between emerging urban needs and mechanisms for meeting those needs, will be maintained."

Existing MTF layout and facilities could effectively be used by the new complex. The existing rail line and deep-water canals would allow the transport of bulk raw materials, such as cement, steel, timber, bricks, and even large modular housing and building units to build Bicentennial City. Also, the existing data-acquisition center, administration buildings, electronics and materials lab, sonic and acoustics facilities, and meteorological labs could be used by the Urban Research and Development Center, along with the heating plant, maintenance building and warehouses, docks, and railyard. The nearby associated NASA Michoud Facility might also be used by the center for assembly and testing of large modular housing and building structures, and the nearby NASA Slidell Facility's computer operation could be put to work too.

It's a terrific idea.—END